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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,654	01/14/2005	Jonathon Reo Campian	5772-000001/US/NP	2174
27572 7590 12/24/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EXAMINER OMGBA, ESSAMA	
			ART UNIT 3726	PAPER NUMBER
			MAIL DATE 12/24/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/521,654	CAMPIAN, JONATHON REO	
	Examiner	Art Unit	
	Essama Omgba	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-10,12-14,18-23,25,26 and 35-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-10,12-14,18-23,25,26 and 35-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/17/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 4, 5, 10-12, 17, 18 and 23-25 is withdrawn in view of the newly discovered reference(s) to Sawa (US patent 5,228,190), Massee (US Patent 4,565,081) and Persson (US Patent 6,694,793). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 5-7, 10-14, 18-20, 23, 25, 26 and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawa in view of Massee.

With regards to claims 1, 5-7, 10, 13, 14, 18, 19, 23, 26, 35 and 37, Sawa discloses an apparatus for forming and joining a first sheet material W_o to a second sheet material W_i , the apparatus comprising a nest 5 for holding the first sheet material, the nest including a material-contacting portion, a forming and joining assembly 1 operatively associated with the nest, the assembly including a robotic arm 2 and a forming steel assembly 3 operatively associated with the robotic arm, an a tool steel which forms a short flange on the first sheet material by bending th3e short flange onto the second sheet material (fig. 3). Sawa discloses that the tool steel can be pressed by a force-sensitive servo control, see columns 7-9. Sawa does not disclose using a positional pressure control. However Massee teaches a roller forming tool arrangement in which the roller forming tool is pressed by a memorized position/pressure control.

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Massee advises that such a system eliminates instability encountered with force-sensitive servo systems due to variations in thickness of the material or eccentricity of the former, see column 1, lines 4-37. therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have substituted the force-sensitive servo control of Sawa with the memorized position/pressure control of Massee, in order to control instability due to material thickness tolerance variations. Applicant should note that it is conventional to operatively associate a computer having a tool-driving program with such robot arm. See also hub 11, cylinder 13 and spring 10 in figure 2 of Sawa or figure 2 of Massee for the cylinder/hub/spring recitation.

Regarding claims 12 and 25, see surface 5a in figure 3 of Sawa.

Regarding claim 20, see column 3, lines 28-35 and 51-52 of Sawa.

Regarding claims 35 and 37, see figure 2 of Sawa with extension 13b considered a tool steel.

Regarding claims 36, 38 and 39, applicant should note that a change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results.

4. Claims 8, 9, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawa/Massee as applied to claims 6, 7, 19 and 20 above, and further in view of Persson.

Sawa/Massee discloses an apparatus for short flange forming as shown above except for the extension including a second forming tool. However Persson shows such hemming tools to be well known in the art, see rollers 4 in figure 1. Therefore it would

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have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the hemming tool of Sawa/Massee two roller forming tools as taught by Persson, in order to facilitate pressing various work shapes. Applicant should note that using a tiered extension with two forming tools is an obvious matter of design choice.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 5-10, 12-14, 18-23, 25, 26 and 35-39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/
Primary Examiner, Art Unit 3726

eo
December 21, 2008